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VOCATIONAL EDUCATION INFORMATION SYSTEM. FINAL REPORT.

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STATE- AND FEDERAL-LEVEL DESIGN SPECIFICATIONS WERE DEVELOPED FOR A SYSTEM CAPABLE OF COLLECTING AND REDUCING NATIONWIDE STATISTICAL DATA ON VOCATIONAL EDUCATION. THESE SPECIFICATIONS WERE EXPECTED TO PROVIDE THE BASIS FOR THE ADOPTION BY ALL STATES OF AN INFORMATION REPORTING SYSTEM THAT WOULD MEET BOTH PRESENT AND FUTURE FEDERAL REPORTING REQUIREMENTS. THE PROPOSED SYSTEM WOULD BRIDGE THE GAP BETWEEN EDUCATIONAL ACCOUNTING AND COMPREHENSIVE NATIONWIDE QUANTITATIVE AND QUALITATIVE ANALYSIS OF VOCATIONAL EDUCATION PROGRAMS. DURING THE COURSE OF DESIGNING THE SYSTEM, NUMEROUS CONFERENCES WERE HELD WITH FEDERAL AND STATE VOCATIONAL EDUCATION PERSONNEL TO DEFINE THE BASIC DATA NEEDED TO MEET IMMEDIATE REPORTING REQUIREMENTS. IN ADDITION, A TOUR OF SEVEN STATES WAS MADE TO SURVEY EXISTING VOCATIONAL EDUCATION REPORT SYSTEMS AND PROCEDURES, PROCESSING TECHNIQUES, AND PROBLEMS RELATED TO DATA COLLECTION AND RETRIEVAL. AFTER THE BASIC DATA WAS DEFINED, A PROTOTYPE SYSTEM WAS DESIGNED FOR THE STATE OF CALIFORNIA AND DEMONSTRATED IN A FIELD TEST. ALTHOUGH ONLY A LIMITED NUMBER OF COMPUTER PROGRAMS WERE WRITTEN FOR THE DEMONSTRATION, THE RESULTS WERE DETAILED ENOUGH TO REFINE THE PROTOTYPE DESIGN FOR APPLICATION TO A UNIVERSAL SYSTEM. A PRELIMINARY STUDENT REPORT FORM WAS DEVELOPED DURING THE EARLY STAGES OF THE DESIGN PROGRAM BUT, DUE TO COMPLEXITIES OF GATHERING STUDENT DATA FROM MANY STATES, STAFF ACTIVITY DATA WAS USED INSTEAD AS THE DATA BASE FOR THE DESIGN AND DEMONSTRATION PHASES. THE PRELIMINARY STUDENT RECORD CARD AND ACCOMPANYING INSTRUCTIONS ARE INCLUDED IN THE REPORT. RECOMMENDATIONS WERE DELINEATED FOR FURTHER DEVELOPMENTAL EFFORT. DETAILED SYSTEM DESIGN SPECIFICATIONS WERE PRESENTED IN THE FEDERAL AND STATE OPERATING MANUALS--AA 000 156, AA 000 157, AND AA 000 158. (JH)

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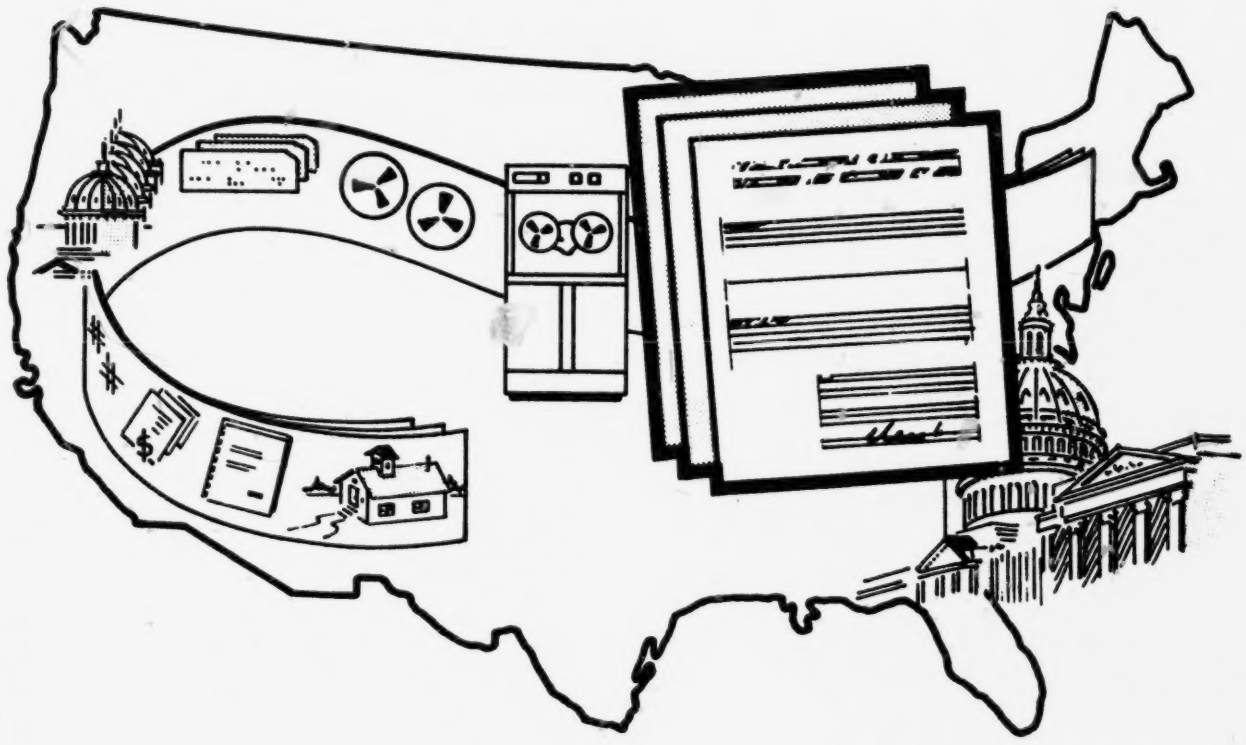

FINAL REPORT

1 OCTOBER 1966

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Office of Education

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INDUSTRIAL PARK, PARAMUS, N. J. 07652

VEIS FINAL REPORT

OCTOBER 1966

INTRODUCTION

This report summarizes the recommendations, observations, and project activity of the contractor in performance of contract No. OE-5-99-170, Vocational Education Information System (VEIS). The prime objective of this project, initiated in May 1965, was the development of State-level and Federal-level system design specifications for the collection and reduction of nationwide vocational education statistical data.

The need for a soundly-based reporting system was evident from the early stages of the project. Vocational education is severely handicapped in making timely and adequate evaluations of its methods and achievements by inadequate statistical reporting procedures. Federal, State, and local personnel responsible for developing and evaluating vocational education programs voiced the same thought: that this project (VEIS) should not be relegated a minor role and result in a mere exercise; but, instead, it should be given ample support to assure the development of an effective product.

Ample support was given to the project by its many participants, and a system design compatible with the needs of vocational education was developed. The design was reviewed and accepted by the U.S. Office of Education and the Seven-State Advisory Group. It was the consensus of opinion that the contractor design should provide the basis for the adoption by all States of an information reporting system capable of meeting both present and future Federal reporting requirements. The proposed system will bridge the present gap between educational accounting and comprehensive nationwide quantitative and qualitative analysis of vocational education programs.

This report is divided into three sections and Appendices as follows:

Section 1, Recommendations
Section 2, Project Recap
Section 3, Seven-State Advisory Group Review Conference
Appendix A, Five-Year Cost Model for California

Appendix B, Student Record Forms and Instructions

The contractor wishes to thank all Federal, State, and local personnel that actively shared in developing and perfecting this system.

SECTION 1

RECOMMENDATIONS

The task of administering vocational education programs at both Federal and State levels is a monumental one and certainly is not without its problems. Every effort should be made to develop methods and procedures to improve the administering functions. One step toward this end is the utilization of an effective reporting system, such as the one developed during this project. For maximum utilization of the system, it is recommended that:

a. The State-level system presented in the State Operating Manual be used by all States as the basis of a nationwide data reporting system. States that already have a reporting system utilizing data processing techniques should only be required to adhere to the output tape formats. (Reports are sent to the U.S. Office of Education on magnetic tape.) States that still use manual methods or are in the early stages of developing an automated system, should use the contractor's system as a foundation. These States should employ system analysts and programmers, or outside consultants, to make the VEIS compatible with the State's data processing equipment and reporting needs.

b. Organizational structures of Federal and State agencies be reorganized to provide closer coordination between vocational education and data processing organizations. Staff functions should be created with the sole responsibility of developing the system and placing it into operation.

c. State vocational education departments, that are frequently organized along the lines of vocational education programs (agriculture, home economics, trades and industry, etc.), should more closely coordinate their activities and not function as truly autonomous units. Closer coordination will eliminate redundant operational functions and reporting requirements now imposed upon the schools.

d. Present reporting requirements for State needs be carefully screened. A large quantity of data is being collected that does not serve any useful purpose other than meet the "whims" of certain administrators or outmoded analytical requirements.

e. A common reimbursement formula be developed for all vocational education programs within a State.

f. A data bank be created, at both State and Federal levels, that will serve the needs of all potential users. The data bank should eliminate the need of frequent special reports imposed on local schools. The data bank should provide a central source for all data requirements for the majority of the statistical studies required.

g. Federal assistance (funds and consultation) be made available to those States requiring aid to accelerate the development of a VEIS.

h. Data collected and reduced by either the State or Federal agencies be made immediately available to the subscribers of VEIS. For example, reports submitted to the U.S. Office of Education in September should be processed and published during the following January or sooner. As a case in point, the 1964 reports (A Review of Activities in Federally Aided Programs, Vocational and Technical Education) were released approximately August of 1966. Obviously, printing and publishing data two years after the fact detracts from its value.

i. Requests for information from local schools be promptly honored. Data should be available from a central data bank. Supporting schools in an expeditious manner will help in soliciting their cooperation in the effective implementation of the reporting system. The schools are the prime source for the data collected on the VEIS.

j. All potential users of the system be advised of its capabilities to avoid redundacy in data requests imposed upon the schools.

k. Any changes in present Federal reporting requirements (basis for contractor-designed VEIS) should be documented as to tape format changes and definition of terms.

l. A conversion computer program be prepared by the U.S. Office of Education that can be used to sum data of all the States on magnetic tapes. Although the tape format is established, the languages could differ from State to State. Each State should be given a copy of this program.

SECTION 2

PROJECT RECAP

This section presents a summary of significant activities performed during the VEIS program. These activities are keyed to the tasks listed and described in the Statement of Work in contract No. OE-5-99-170.

Orientation

The project was initiated in May 1965, at which time orientation conferences were held with the U.S. Office of Education to provide contractor personnel with an overview of the VEIS program. The contractor was provided with a number of Office of Education publications, forms, and miscellaneous data for evaluation. This documentation and, in particular, the Federal "green forms" were used to form a basis for developing a list of collection items for the information reporting system.

Collection Items (Task 1)

After a series of meetings with cognizant U.S. Office of Education personnel and the Seven-State Advisory Group, a list of collector items was developed and formally accepted by the Office. Because the list of items served as the basis for the system design specification, a great deal of emphasis was placed on formulating a list that was both comprehensive and practical. Before the list was finalized it was revised several times; each revision further refined the list to delineate the essentials of the reporting system.

Criteria used in generating the list are listed below:

a. Federal reporting requirements
b. Availability of data at various reporting levels
c. Quantity of data to be processed
d. Cost considerations

In addition, items were included to cover data unique to California reporting procedures and staff data proposed by BEDS and considered feasible for collection during the California demonstration.

Definitions (Task 2)

A glossary of terms commonly used in the VEIS was compiled and approved by the U.S. Office of Education. The basic sources of definitions were the following publications prepared by the U.S. Office of Education:

a. State Educational Records and Report Series:

   Handbook I, The Common Core of State Educational Information (Bulletin 1953, No. 8)

   Handbook II, Financial Accounting for Local and State School Systems (OE-22017)

   Handbook III, Property Accounting for Local and State School Systems (OE-21019)

   Handbook IV, Staff Accounting for Local and State School Systems (OE-23039)

   Handbook V, Pupil Accounting for Local and State School Systems (OE-23035)

b. Part 104 - Administration of Vocational Education: Federal Allotments to States: Rules and Regulations

When necessary, definitions from the above sources were modified to meet vocational education reporting requirements. All changes were coordinated with cognizant U.S. Office of Education personnel.

Collection Formats (Task 3)

The design for the collection forms underwent three stages of development. The first stage produced a set of draft forms that was presented to the U.S. Office of Education and the Seven-State Advisory Group at a meeting held in Washington, D.C., on 16 September 1965. This group of forms included a student record form, professional staff form, and various financial and statistical data forms. The student and professional staff forms were preformatted for use with optical-scanner equipment. The other forms were preformatted to facilitate data conversion by key-punch operators. The following guidelines were used in developing these forms:

a. Preliminary list of data items prepared under Task 1
b. The findings of the FEC-conducted Seven-State Survey
c. Conclusions of previous conferences with the U.S. Office of Education
d. The BEDS codes and information items furnished FEC prior to the 16 September 1965 meeting.

After the forms were accepted by the U.S. Office of Education, the second stage of development commenced: the forms and associated instructions were modified to reflect both the needs of the State of California and the U.S. Office of Education vocational education personnel. Although the student record form was finalized, it was not used during the California demonstration or for the final system design. Employing a student form would have placed an excessive load on the present State reporting process. Emphasis instead was placed on developing financial forms to assist the State in its determination of reimbursements. It should be noted, however, that the student record form can easily be integrated into any VEIS in the future. The form and associated instructions are included in Appendix B for reference purposes. The professional staff form was changed to a key-punch format and more closely aligned with the BEDS reporting requirements.

The final stage of development utilized the results of the California demonstration to further refine the forms and instructions. It was found that the participants in the demonstration did not have difficulty in completing the forms. Several problems that did occur were traced to the fact that the instructions were not read before the forms were completed. In some instances, the instructions were not clear and were rewritten for the final design. The final forms were included in the State Operating Manual.

Seven-State Survey (Task 13)

The purpose of the survey was to collect information related to the vocational education reporting systems and procedures and the processing techniques currently in use in the seven states selected as typical representatives by the U.S. Office of Education. The seven states were California, Illinois, Iowa, Maryland, New York, Tennessee, and Texas. The survey findings served as a basis for the development of the Federal-level and State-level reporting systems. All the States displayed a high degree of interest in the objectives of VEIS, with the hope that the system will be of practical interest and not just another exercise. The States also expressed the hope that the Federal government will provide financial assistance to implement a VEIS.

A number of the more significant survey findings follow:

a. Most of the data collected was keyed to the States' requirements for determining financial reimbursement to individual schools or school districts. Although the methods of determining the rates of reimbursement differed among the States, the same basic data was collected. All the States emphatically declared that their reimbursement procedures should not be controlled or

standardized by any procedures developed by VEIS. It was pointed out that the standardization for a data retrieval system does not necessitate standardization of reimbursement policies, although some standardization among the States would reduce many of the problems in evaluating nationwide statistics. Nevertheless, standardization within a State itself was imperative.

b. The various State vocational education organizations were usually organized along lines of the major vocational education programs (agriculture, health, trades and industry, etc.). These individual divisions usually functioned as autonomous operating groups reporting to a single authority, with each group usually employing its own reporting system. Consequently, schools frequently had to complete forms for each group, duplicating their reporting activities.

c. It was found that, while the data processing group within a State Department of Education functioned as a support group for all educational activities, there appeared to be minimum coordination with the vocational education group. Consequently, the reporting systems did not keep pace with the latest data retrieval and reduction techniques.

d. In all the States visited, it was found that members of the vocational education staff spent a large amount of time checking reports for accuracy and completeness, tasks that could easily be performed by clerical help or by the use of automated processing techniques.

e. The reporting systems observed frequently lacked a degree of standardization because detailed operational procedures were not documented. As a result, it was difficult to achieve uniformity in actual report preparation.

f. Collection of follow-up data was accomplished in a very limited manner. Effective procedures were required to obtain current and useful data in order to develop meaningful statistics.

g. In a few States it was found that existing data processing equipment would not be capable of effectively handling a complete vocational education information system. However, in anticipation of increased data processing requirements, additional equipment had been ordered for delivery in 1966 and 1967.

State-Level System Demonstration (California Demonstration, Task 26)

After a series of meetings were held with U.S. Office of Education and California representatives to determine the California data requirements necessary to meet Federal

reporting needs, a prototype design was developed. The design was made compatible to the RCA 301 computer made available to the contractor for the demonstration. The primary purpose of the demonstration was to field test the collection forms and computer programs that were prepared as part of the project. Because of time limitations, only a sampling of schools offering vocational education programs was selected for the field test and only a limited number of programs to process the data was written. The schools selected are iisted below:

a. Modesto City Schools
b. Yosemite Junior College
c. College of San Mateo
d. San Benito Joint Union High School District
e. San Diego Unified School District

Representatives from the five districts participated in an orientation program explaining the use of the collection forms and the purpose of the demonstration. After the orientation the representatives returned to their respective schools and instructed staff members on the preparation of the forms. The torms were completed, forwarded to Sacramento where they were key-punched, and used as data inputs for the computer. The printouts (selected "green-form" data) were included in the State Operating Manual. The results were evaluated and used to develop the universal system design.

Federal-Level and State-Level System Designs and Operating Manuals (Tasks 20 and 32)

The specifications developed were not directed toward any equipment configuration but prepared so they could be adaptable by any State. The specifications, included in the State Operating Manual, contain sufficient detail so they can be used as the basis for a State to develop a system unique to its own requirements. However, in order to obtain uniformity in the outputs developed for the Federal-level, it is expected that each state will conform to the output format in the specifications.

In the course of developing the system, several approaches were considered; such as, student, program, course, and staff data used as a base. To comply with an U.S. Office of Education requirement that VEIS be compatible with BEDS, it was decided to develop a system using staff activity data as a base. As noted earlier, a prototype design was first developed for California and then, based on the results of the demonstration, a universal system was designed.

Although conducted with a limited amount of input data, the California demonstration results show that the system could serve as a basis for developing a system for the States. It will, however, be necessary for system analysts and programmers to use the universal design and develop a system and programs compatible with a State's equipment availability and data requirements.

SECTION 3

SEVEN-STATE ADVISORY GROUP SYSTEM REVIEW CONFERENCE

A conference was held in Washington, D.C., on 23-24 June 1966 with the Seven-State Advisory Group and the U.S. Office of Education. Representatives from approximately twenty other States attended the conference. A list of attendees appears at the end of this section.

The contractor presented the final design for VEIS. With several minor corrections, the system was accepted as presented and the contractor was commended for his performance during the contract period.

Because a number of significant questions were raised during the conference, the U.S. Office of Education requested that the more pertinent questions and answers be included in this report.

1. Why were the reimbursement computations included in the Statistical Subsystem instead of the Financial Subsystem of the VEIS?

   A. The Financial Subsystem only computes data at the State-level; the information collected at this level is primarily related to State summary data forwarded to the Federal government. The Statistical Subsystem collects data at the local level: included are staff activity data that are used as the raw data for reimbursement computations.

2. When should follow-up data be collected so that they reflect valid statistical data?

   A. Although there was no actual date established, it was the consensus of opinion of the conferees that at least six months should elapse after a student completes a program before follow-up data is collected. Collecting data several months after a student completes his vocational education program would reflect firm job placement (or an unemployed situation) and

not just temporary "first-job" placements. It was pointed out that follow-up data should also be collected one, two and three years after completing a program to obtain statistical results of some significance. Such practice, although useful, would be costly to implement.

3. Was the VEIS developed to reflect the California reporting requirements?

   A. The prototype design was developed to reflect several unique California reporting needs, the RCA 301 computer used during the demonstration, and the Federal reporting requirements. The final universal design was not directed toward any equipment configuration or State needs, but was made adaptable for utilization by any State. A few California needs are included on the collection forms; however, they have been appropriately annotated.

4. Did the California printouts meet the State and Federal audit requirements?

   A. The printouts obtained in the California demonstration were selected data on the Federal "green forms." If the green forms meet the audit requirements, the printouts should meet the same requirements.

5. Will there be any further efforts to validate the data collected by the system?

   A. Several error checks will be included in the final design specifications. Emphasis should be placed at the original data source for accurate and complete information.

6. Will present U.S. Office of Education reporting requirements meet immediate and future vocational education requirements? Why expend time and money if the Federal government plans to change its data requirements.

   A. The system reflects the present requirements that will satisfy vocational education reporting needs; however, it is impossible to predict what the future requirements will be. The system design is flexible and can be easily altered or expanded to meet new demands. However, all changes should be coordinated with the States, and sufficient lead-time should be given to the States to institute any changes that are made to the Federal reporting requirements.

7. Does the VEIS design suggest a specific equipment configuration?

   A. The design is not directed toward any specific equipment configuration. Sufficient detail is present for system analysts and programmers to adapt the system and write computer programs for specific equipment.

8. Were local and State needs considered along with U.S. Office of Education requirements in the design of the system?

   A. Only State and Federal requirements were considered. Local needs can be integrated into individual State designs.

9. What was the accuracy of the data reported by staff members?

   A. Although there was no detailed or statistical check, it was reported that the data used for the demonstration was extremely accurate.

10. What kind of field assistance can the States expect from the Federal government in developing individual State systems?

    A. The U.S. Office of Education expects to give some support to the States; however, to what degree was not known. The States were asked to contact the U.S. Office of Education in regard to this problem.

11. Should a parallel reporting system be used to validate the VEIS?

    A. Before a State system is made operational, the prototype design should be checked by a parallel (existant) system before replacing the present system. It is important, however, to avoid redundant information system development programs within a State or group of States. Needless developmental costs will be incurred if different groups are charged with the same objective: developing an operational VEIS or general education reporting system.

12. To what extent does the California design (and demonstration) satisfy the requirements of other States?

    A. Approximately 50 percent of the system is applicable to other States. The Accessory Subsystem, in particular, should be applicable.

13. How can duplicate counts be eliminated in follow-up data?

    A. This is a difficult problem that must be resolved by the individual schools.

14. Why use forms with only a limited number of data collection items?

    A. Preformatted forms were developed to facilitate key-punch operations and, therefore, each form was limited to responses that will occupy no more than 80 columns of data (equivalent to an 80-column punch card). A number of key-punch operators and system analysts have concurred on the simplicity and practicability of the preformatted forms.

15. Why include minutes per period, periods per day, and days per week data items on the VEIS-1 form?

A. This data is required for calculation of reimbursement.

16. How can form VEIS-1 be used if reimbursement is determined by attendance hours?

A. The form will have to be redesigned to provide space to enter aggregate absentee hours and this total subtracted from the total contact hours.

17. How can duplicate student count be eliminated with the use of this system?

A. The system as presented will not eliminate duplicate student count; however, if enrollment is reported (by a department head) by vocational education program, duplicate count could be eliminated. (Note: The instructions for VEIS-1 were amended for the State Operating Manual to incorporate this provision.) The use of a student report form is another method of eliminating duplicate student count. The present system would have to be radically revised to accommodate a student form.

18. How can form VEIS-1 be used to identify the period a staff member is teaching a particular course?

A. The "sequence number" spaces can be used for this purpose. Enter the period number instead of a sequence number.

19. How can form VEIS-1 be identified as to whether it is a fall, spring, or summer report?

A. Two columnar spaces will be added to the form for date information. A code can be used to designate the applicable school semester.

20. How can this system be used to obtain teacher certification data?

A. The teacher's social security number (on form VEIS-1) can be used to retrieve teacher certification data that was collected and stored under a separate system. Although the VEIS is not designed to collect teacher certification data, it can be modified to collect teacher data.

21. Can this system be used for quarterly reimbursement?

A. The system can be used for quarterly reimbursement by implementing the annual procedure on a quarterly basis.

22. Will the FEC-designed student report form be included in the final report?

A. The student report form will be included in an appendix to the final report.

23. Can the VEIS be used to develop a school directory?

A. The VEIS can be partially used toward developing a school directory. Collection form VEIS-12 is a start toward a directory.

24. What is the relationship of BEDS to VEIS? Will two collection systems be in operation?

A. As required by the contract, the VEIS was designed to be compatible with BEDS. Whether two parallel systems will be in operation or whether one will absorb the other is a decision the U.S. Office of Education must make. In all probability, only one reporting system will be used to collect all education data.

25. Does BEDS now provide all the vocational education data?

A. BEDS provides the majority of vocational education staff data required by the U.S. Office of Education. Several BEDS data items required by vocational education were included in report form VEIS-1, using codes prepared by the U.S. Office of Education. When necessary, changes were made to these BEDS items to make them applicable to vocational education.

26. Is it possible to identify BEDS items and data items unique to California on the VEIS collection forms?

A. The BEDS and California items will be appropriately annotated on the VEIS report forms included in the State Operating Manual.

27. Is there provision for class enrollment on the VEIS forms?

A. Form VEIS-1 has provision for class enrollment.

28. Why were only a limited number of computer programs run in California?

A. Limitations on the California demonstration were imposed upon the contractor by the terms of the contract.

29. Why aren't separate codes for shop, laboratory, and classroom teachers included in the list of codes provided with the instructions for form VEIS-1?

A. The list of codes was prepared by the U.S. Office of Education who must institute any changes to the codes. The Office is now considering several changes to the codes and will forward a revised list to all States when completed.

30. Why were business brochure expenses included on VEIS-1?

A. Business brochure expenses are unique to California's reporting system.

31. Should the U.S. Office of Education prepare universal input forms for all States?

A. Because many States would like to incorporate unique report items, it is impractical for the U.S. Office of Education to prepare a universal set of forms. However, it may be possible for the U.S. Office of Education to provide individual States with some assistance in the design and printing of the forms.

32. Will a cost model be included in the final report?

A. A cost model for California will be included in the final report.

33. What action, if any, will CEDS take in relation to VEIS?

A. It was reported that CEDS will form a coordinating committee to advance the objective and needs of vocational education.

34. Does the VEIS design presented at this conference meet present vocational education requirements?

A. If unduplicated student count is included in the design, the system, as presented, fulfills present vocational education requirements.

Roster of those attending the
Vocational Education Information System Conference
Washington, D.C.
June 23-24, 1966

Alabama	J. F. Ingram George L. Layton
Arizona	Martha Beaubrien
California	Peter J. Tashnovian Don R. Youngreen
Florida	G. W. Neubauer
Georgia	George W. Mulling
Illinois	V. E. Burginek Rick Ripley Bruce E. Wheeler
Iowa	Larry Blom Eugene Dorn Marvin W. Ingle Windol L. Wyatt
Kentucky	Arnold Guess Edgar E. Hume, Jr.
Maryland	Richard K. McKay James L. Reid
Michigan	Richard J. Shupe
Minnesota	S. K. Wick
Mississippi	George F. LaFallette
New Jersey	S. David Winans
New Mexico	H. E. (Gene) Schrader
New York	Robert Seckendorf John J. Stiglmeier
North Carolina	A. G. Bullard William W. Peek
Ohio	C. O. Tower
Rhode Island	T. H. Sandham
South Carolina	W. E. Gore
Tennessee	B. E. Childers Charles Pullen
Texas	James F. Jeffrey

Virginia	Frank H. Elliott
Washington	Frank Wimer
West Virginia	Fred W. Eberle
Wisconsin	Doris Hanson Robert Ristau

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Stanley V. Smith

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George B. Ashenfelter
Joan A. Paquin
Rudolph E. Toldrian
Irwin R. Zwickel

APPENDIX

A. Five Year Cost Model for California

B. Preliminary Student Report Forms and Instructions

APPENDIX A

Five-Year Cost Model for California

This section presents a five-year cost model for the State of California to develop a vocational education reporting system based on the design specifications included in the VEIS State Operating Manual. This cost model extends costs for system analysis and design, computer program development and debugging, and other incidental items; however, it does not include the actual implementation and operation of the system. As with any cost model, a number of basic assumptions must be made in order to establish a basis for cost extensions. For this particular case, tasks that probably would be performed by the State or the normal department operating costs are not considered in any of the cost prognostications. These excluded items are listed below:

a. Labor costs for printing VEIS report forms
b. Costs attributed to the distribution and collection of VEIS report forms
c. Outside contractor services
d. Computer time for debugging, system tests, and operational needs
e. Expenses incurred by local school administrators during orientation conferences
f. Costs for purchasing punch cards

The task descriptions and cost analysis for the model are presented in the following paragraphs:

Task Descriptions

The system design specifications and report forms contained in the VEIS State Operating Manual will be used as a starting point for all tasks. Complete familiarization with the contents should provide a firm basis for system analysts and programmers assigned to the project. The major tasks considered for the model are listed in the phasing chart shown in exhibit A and are briefly described below.

Task a. Research - Determine whether additional or revised reporting requirements have been imposed on the system since the VEIS design was finalized in June 1966. A review of reimbursement procedures should be conducted to determine the extent of the changes made. (During the California demonstration it was learned that reimbursement procedures would be revised

so that all four bureaus utilize a basically similar method.)

Task b. System analysis - This task involves all activity preliminary to the development of the computer programs; namely, collecting, organizing, and evaluating facts about the system and the environment in which it will operate.

Task c. Report form modification - Based on the results of tasks a and b, the report forms contained in the State Operating Manual will be modified as required.

Task d. Computer program development - Computer programs will be written to provide the necessary outputs to meet Federal reporting requirements, as well as specific internal State needs.

Task e. Computer program debugging - Debug computer programs that were written during task d.

Task f. Report form printing - Print VEIS report forms as modified during task c. The required amounts are shown in exhibit B.

Task g. System orientation - A series of orientation conferences will be held (in Sacramento) with school administrators from throughout the State. These conferences will explain the objective of VEIS and the procedure for completing the report forms. The conferees will return to their schools and administer the preparation of all local-level forms. The initial conferences will be conducted by the system analysts; however, once State personnel become familiar with the system they will conduct seminars at State or regional locations when required.

Task h. Distribution and collection of report forms - The report forms will be distributed to all schools, school districts, and State personnel that have the responsibility for preparing reports for the State Department of Education. Forms will be completed and returned to Sacramento in accordance with schedules prepared by the State.

Task i. Key-punch and verification - All the forms collected during task h will be key-punched and verified.

Task j. Program documentation - Program descriptions, flow charts, etc., will be prepared for the programs written during task d.

Task k. System test - Programs will be run using the real data collected throughout the State. The existant reporting system will be used as a standard

against which the VEIS outputs will be compared. A successful test should place the system in an operational status.

Task I. Program revision and documentation - As reporting requirements change and new demands are placed on the system, the report forms and computer programs will be updated on a periodic basis.

Cost Analysis

Using the manpower phasing chart included in Exhibit A, the following costs were estimated for developing and updating the system over a five-year period. As noted earlier, several cost considerations are not included in the summary that follows. The salaries shown are based on present market conditions and are used for estimating purposes only. The back-up for the cost summary is provided in exhibit C.

		Year 1	Year 2	Year 3	Year 4	Year 5	Total
System Analyst A	$14,000/yr.	$14,000	$ 7,000				$21,000
System Analyst B	$12,000/yr.	10,800					10,800
Sr. Programmer A	$12,000/yr.	12,000					12,000
Sr. Programmer B	$10,000/yr.	10,000					10,000
Jr. Programmer	$ 6,000/yr.	1,800	4,800	3,000	3,000	3,000	15,600
Key-punch operators (12¢/card)		12,000	9,400	9,400	9,400	9,400	49,600
Total labor		60,600	21,200	12,400	12,400	12,400	119,000
Material for printing forms		250	250	250	250	250	1,250
TOTAL COST		$60,850	$21,450	$12,650	$12,650	$12,650	$120,250

EXHIBIT A

TASK AND MANPOWER PHASING CHARTS

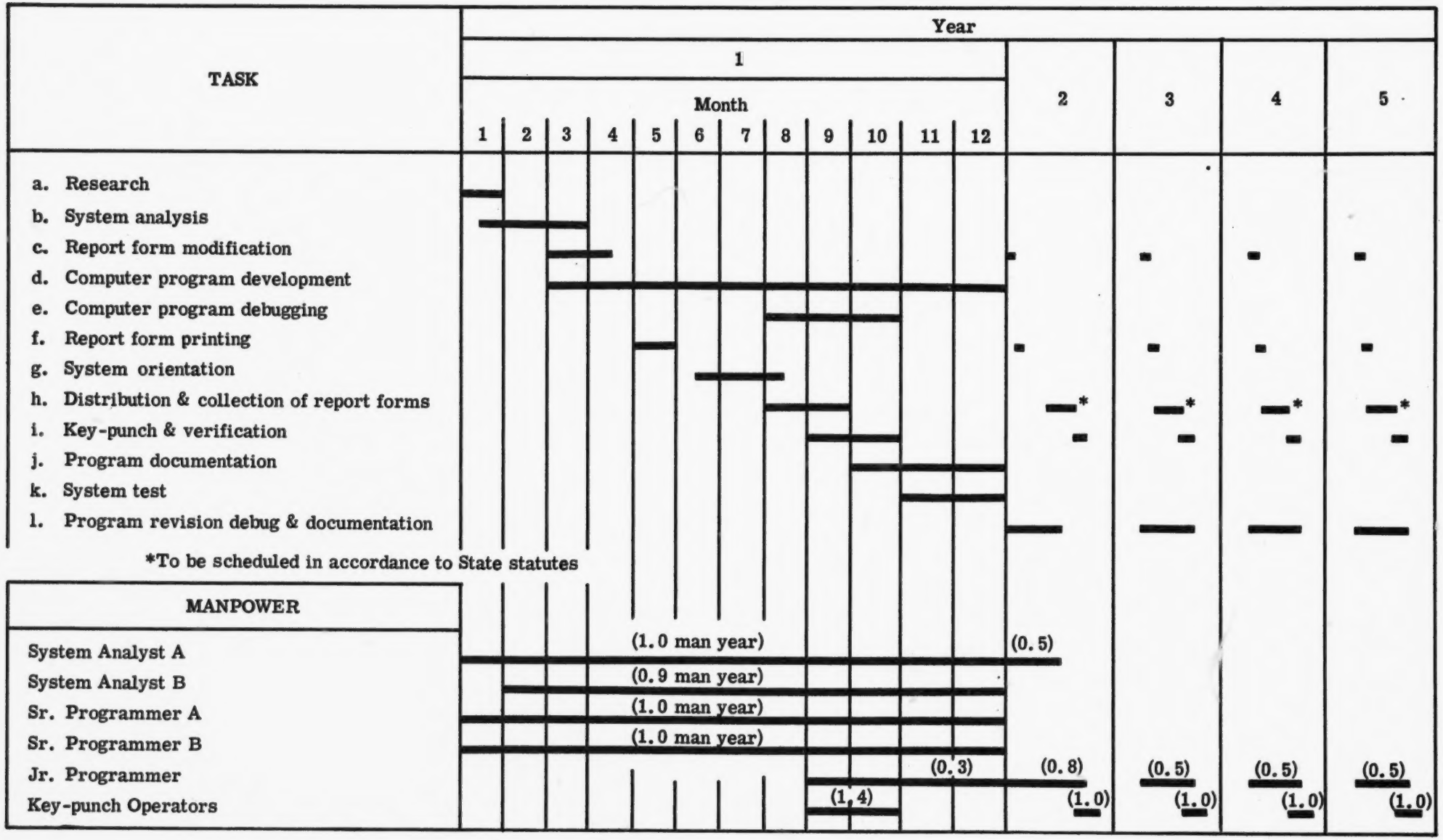

EXHIBIT B

TOTAL FORMS REQUIRED IN CALIFORNIA

The following is a list of the estimated quantity of forms which are anticipated for completion at the local and State levels during each reporting period. The grand total is estimated to be 100,600 forms. To determine total printing quantity, the associated instructions must be considered.

VEIS 1	Part 1	Professional Staff Record for Vocational Education (local and State level)	
		Total	15,500
VEIS 1	Part 2		
		Total	62,000
VEIS 2		Follow-up of Enrollees in Cooperative and Preparatory Vocational Education Programs (local level)	
		Total	3,650
VEIS 3		Status of Professional Staff Training in Vocational Education (local level)	
		Total	200
VEIS 4		Project Status and Expenditures of Area Vocational School Construction (local level)	
		Total	100
VEIS 5		School Instructional Expenditures for Vocational Education - By Program (local level)	
		Total	11,700
VEIS 6		School Ancillary Service Expenditures for Vocational Education - By Program (local level)	
		Total	6,570
VEIS 7		Expenditure of Federal Funds for State Board and State Teacher Education and Local Boards of Education for Vocational Education - By Program (State level)	
		Total	32
VEIS 8		Expenditure of State Funds for State Board and State Teacher Education and Local Boards of Education for Vocational Education - By Program (State level)	
		Total	27

VEIS 9	Expenditure of State and/or Local Funds for Vocational Education - By Federal Act and Purpose (State level)	
	Total	6
VEIS 10	Expenditure of Federal VEA'63 Funds for Vocational Education - By Purpose (State level)	
	Total	1
VEIS 11	Financial Statement of Federal Funds for Vocational Education (State level)	
	Total	6
VEIS 12	Staff Header Card for Vocational Education Administrative Organization Unit (local - State level)	
	Total	800

EXHIBIT C

BACK-UP FOR COST ANALYSIS

COBOL Instruction Estimates for First Year

Statistical Subsystem Programs:		
Staff Activity	2,000	Instructions
Reimbursement	2,000	
School Type	500	
Enrollment	1,000	
Personnel	500	
Subtotal		6,000 Instructions
Financial Subsystem Programs:		
Expenditure of Funds by Program	3,000	Instructions
Expenditure of Funds by Purpose	500	
Financial Statement of Federal Funds	500	
Subtotal		4,000 Instructions
Accessory Subsystems Programs:		
Follow-Up	1,400	Instructions
School Instructional Expenditures	800	
School Ancillary Expenditures	1,000	
Professional Staff Training	800	
Construction	800	
Subtotal		4,800 Instructions
Grand Total		14,800 Instructions

Manpower requirements@ 15 instructions per day: 3.9 man-years for first year

Key-punch and Verification Estimates for First Year

Manpower requirements@ 35 cards per hour: 1.4 man-years for first year (100,600 cards)

APPENDIX B

STUDENT REPORT FORMS AND INSTRUCTIONS

This portion of the Appendix contains the preliminary student report forms and instructions that were developed during the early phases of the VEIS project. In establishing a data base for the system, student data as well as other methods were considered. After several conferences with the U.S. Office of Education, at which time the pros and cons of the various approaches were considered, staff activity data was selected as the most appropriate data base to obtain the immediate objectives of VEIS. A few of the more predominant considerations are listed below.

a. Many of the States are not in a position to collect student data at this time. The use of the student report forms would require that several hundreds of thousands of forms (for individual States) be completed, collected, and processed by State data processing centers.

b. Using the student report forms during the California demonstration would have disrupted the normal school schedule since it would require substantial participation by the students. In addition, time limitations imposed on the total demonstration made it impractical to include the student report forms.

c. The uncertainty of obtaining the preformatted mark-sense forms in time for the California demonstration. These forms require exact printing to be effective in the optical scanner.

Because a substantial effort was expended on the student report forms, they are included in this report for optional use by the States. The student report forms that follow consist of two parts: Student Record of General Information and Student Record of Course Information.

CONFIDENTIAL

PRELIMINARY

VOCATIONAL EDUCATION

STUDENT RECORD OF GENERAL INFORMATION

STUDENT IDENTIFICATION NUMBER — columns 1–10

CURRENT SCHOOL MONTH — columns 11–13

CURRENT SCHOOL YEAR, 19__ — columns 14–16

CURRENT GRADE LEVEL — columns 17–19

PERSONAL DATA

(YEAR OF BIRTH, 19__) — columns 20–22

23		(MALE)		(FEMALE)
24		4		8
25	(MEXICAN DESCENT)	(NEGRO DESCENT)	(ORIENTAL DESCENT)	(WHITE DESCENT)
26	1	4	5	8
27	(PRIOR STUDENT)	(PRIOR DROPOUT)		(NOT APPLICABLE)
28	1	4		8
29				
30	(EMPLOYED) 1			(UNEMPLOYED) 8
31				
32	(MARRIED) 1			(SINGLE) 8
33				
34	(DEPENDENTS) 1			(NO DEPENDENTS) 8
35		HEAD OF HOUSEHOLD		
36	(YES) 1	6	7	(NO) 8
37				(NOT
38	(PREPARATORY) 1		(SUPPLEMENTARY) 5	APPLICABLE) 8
39				(NOT
40	(COOPERATIVE) 1		(APPRENTICESHIP) 6	APPLICABLE) 8

SCHOOL IDENTIFICATION (REGION CODE) — columns 41–42

(CONGRESSIONAL DISTRICT CODE) — columns 43–46

(COUNTY CODE) — columns 47–50

(SCHOOL DISTRICT CODE) — columns 51–54

(SCHOOL CODE) — columns 55–58

(SCHOOL TYPE) — columns 59–61

GUIDANCE DATA — columns 62–80

TO BE COMPLETED BY GUIDANCE COUNSELOR ONLY

63	YES VOCATIONAL WORK STUDY PROGRAM			NO
64	1			8
65	(1ST QUARTILE)	(2ND QUARTILE)	(3RD QUARTILE)	(4TH QUARTILE)
66	1	4	6	8
67	(FAMILY INCOME LESS THAN $2500)			(FAMILY INCOME GREATER THAN $2500)
68	1			8

TYPE OF PUPIL — columns 69–71

STUDENT NAME _____ DATE PREPARED _____
LAST FIRST MIDDLE

STUDENT IDENTIFICATION NUMBER _____ SCHOOL _____

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PRELIMINARY

INSTRUCTIONS FOR VOCATIONAL EDUCATION

STUDENT RECORD OF GENERAL INFORMATION

(1 December 1965)

GENERAL INSTRUCTIONS TO STUDENT

1. Handle this sheet carefully. Do not fold or bend this sheet.

2. Keep this sheet as clean as possible; make marks only within the boxes (= = =)

3. Use only a black soft lead pencil - #2 lead preferable.

4. Make all erasures complete.

5. Print your last name, first name, and middle initial in the space provided at the bottom of the sheet.

6. Enter your student identification number in the space provided at the bottom of the sheet.

7. Enter today's date in the space labeled "date prepared" at the bottom of the sheet.

8. Print the name of your school in the space provided at the bottom of the sheet.

9. Wait for further instructions from your teacher before you proceed to the detailed instructions that follow.

DETAILED INSTRUCTIONS TO STUDENT

Lines 1 - 9 . . Mark the blanks that correspond to your student identification number. Your identification number will be either your social security number or a number provided by your teacher. The first numeral (the extreme left-hand number) of your identification number is marked on line 1; the second numeral of your identification number is marked on line 2. Continue to mark one numeral on each line until the last numeral (the extreme right-hand number) is marked on line 9. For example, if your social security number is 138-21-6057, you should mark your sheet as follows:

a. line 1, mark blank #1
b. line 2, mark blank #3
c. line 3, mark blank #8
d. line 4, mark blank #2

e. line 5, mark blank #1
f. line 6, mark blank #6
g. line 7, mark blank #0
h. line 8, mark blank #5
i. line 9, mark blank #7

If you are assigned an identification number consisting of less than nine numerals, you will have to change the number so that it contains nine numerals. To make this conversion, add zeros in front of the extreme left-hand number until a total of nine numerals make up the identification number. For example, if your assigned number is 706021, convert this 6-digit number to a 9-digit number by adding three zeros in front of the number, thus converting this number to 000706021. You would then mark your sheet to show this number as cited in the example above. That is, mark blank #0 on lines 1, 2, and 3, mark blank #7 on line 4; continue to mark one numeral on each line until the last numeral (#1) is marked on line 9.

Line 10. . . . . Do not mark any blanks

Lines 12 - 13 . . . . Mark the blanks that identify the month in which you are completing this form. Select the appropriate code from the following list:

a. January . . . . . code 01
b. February . . . . . code 02
c. March . . . . . code 03
d. April . . . . . code 04
e. May . . . . . code 05
f. June . . . . . code 06
g. July . . . . . code 07
h. August . . . . . code 08
i. September . . . . code 09
j. October . . . . . code 10
k. November . . . . code 11
l. December . . . . . code 12

The first numeral (the extreme left-hand numeral) of the code is marked on line 12 and the next numeral is marked on line 13. For example, if you completed this form during the month of September, you should mark your sheet as follows:

a. line 12, mark blank #0
b. line 13, mark blank #9

Lines 15 - 16 . . . . Mark the blanks that correspond to the year in which you are completing this form. Use only the last two numerals of the year. For example, if you are filling out this form in 1965, you should only record the number 65 and mark your sheet as follows:

a. line 15, mark blank #6
b. line 16, mark blank #5

Lines 18 - 19. . . . . Mark the blanks that correspond to your present grade level. The first numeral (extreme left-hand number) of your grade level is marked on line 18 and the next numeral is marked on line 19. For example, if you are presently in the 12th grade, you should mark your sheet as follows:

a. line 18, mark blank #1
b. line 19, mark blank #2

If you are in the 9th grade you must add a zero in front of the 9 to change the number to a 2-digit number (09) and then mark your sheet as follows:

a. line 18, mark blank #0
b. line 19, mark blank #9

If you are presently enrolled in a school program that does not have a grade level designation, select a code from the following list that best describes your status:

a. Supplementary Vocational Program (defined below) . . . . . code 30

b. Part-Time General Continuation Class (Vocational Trade and Industry only) (defined below). . . code 37

Supplementary Vocational Program is a program that is offered as supplemental training to persons already (employed) in the labor market. Such training includes:

a. Adult and young farmer
b. Adult and home economics
c. Extension courses in trades and industry, distributive occupations, office occupations, nursing, and other technical education.

Part-Time General Continuation Class is a class for employed persons who have completed the full-time day school and are re-enrolled for instruction which is designed to increase their civic intelligence rather than to develop specific occupational competence. These classes are usually limited to those under 18 years of age.

Lines 21 -22 . . . . Mark the blanks that identify the year of your birth, using only the last two numerals of the year. For example, if you were born in 1951 you should only record the number 51 and mark your sheet as follows:

a. line 21, mark blank #5
b. line 22, mark blank #1

Line 24 . . . . . .Mark the blank that identifies your sex.

Line 26 . . . . . .Mark the blank that corresponds to your being an American of Mexican, Negro, Oriental, or White descent.

Line 28 . . . . . .Mark the blank that describes your previous school year student category. If you were enrolled as a student during the previous school year and completed that year, you should mark blank #1, "prior student." If you were enrolled as a student during the previous year and dropped out before the school year ended, you should mark blank #4, "prior dropout." If you are enrolled in an adult evening extension course or in any other capacity that cannot be classified as either "prior student" or "prior dropout," you should mark blank #8, "not applicable."

Line 30 . . . . . .Mark the blank that identifies your employment status. If you are employed full-time or part-time, you should mark blank #1, "employed." If you are unemployed, you should mark blank #8, "unemployed."

Line 32 . . . . . .Mark the blank that describes your material status. If you are presently married, you should mark blank #1, "married." If you are divorced or separated, or a widow or widower, you should mark blank #8, "single."

Line 34 . . . . . .Mark blank #1, "dependents," if you have dependents; mark blank #8, "no dependents," if you do not have dependents.

Line 36 . . . . . .Mark blank #1, "yes," if you are head of a household; mark blank #8, "no," if you are not the head of a household. The head of a household is defined as being the individual assuming the responsibility for a family group.

Line 38. . . . . .Mark blank #1, "preparatory," if you are enrolled in a preparatory program; mark blank #5, "supplementary," if you are enrolled in a supplementary program; or mark blank #8, "not applicable," if your program is neither "preparatory" or "supplementary." Your teacher will identify the program for you.

Line 40 . . . . . .Mark blank #1, "cooperative," if you are enrolled in a cooperative program; mark blank #5, "apprenticeship," if you are enrolled in an apprenticeship program; or mark blank #8, "not applicable," if your program is neither "cooperative" or "apprenticeship." Your teacher will identify the program for you.

Lines 41 - 42 . . . .Mark the blanks that correspond to your school region code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the region code is marked on line 41 and the next numeral is marked on line 42. For example, if your school region code is 32, mark your sheet as follows:

a. line 42, mark blank #3
b. line 42, mark blank #2

If the school region code consists of one numeral, you must add a zero in front of the number to make it a 2-digit number. For example, if the code is 9, change the number to 09 and then mark your sheet as follows:

a. line 41, mark blank #0
b. line 42, mark blank #9

Lines 44 – 45 . . . . Mark the blanks that correspond to your Congressional District Code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the Congressional code is marked on line 44 and the next numeral is marked on line 45. For example, if your congressional code is 12, mark your sheet as follows:

a. line 44, mark blank #1
b. line 45, mark blank #2

If the Congressional District Code consists of one numeral, you must add a zero in front of the number to make it a 2-digit number. For example, if the code is 3, change the number to 03 and then mark your sheet as follows:

a. line 44, mark blank #0
b. line 45, mark blank #3

Lines 47 – 49 . . . . Mark the blanks that correspond to your County code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the County code is marked on line 47; the next numeral is marked on line 48; and the last numeral (the extreme right-hand number) is marked on line 49. For example, if your County code is 246, mark your sheet as follows:

a. line 47, mark blank #2
b. line 48, mark blank #4
c. line 49, mark blank #6

If the County code consists of less than three digits, you must add zeros in front of the number to make it a 3-digit number. For example, if the code is 7, change this number to 007 and then mark your sheet as follows:

a. line 47, mark blank #0
b. line 48, mark blank #0
c. line 49, mark blank #7

Lines 51 - 53 . . . . Mark the blanks that correspond to your school district code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the school district code is marked on line 51; the next numeral is marked on line 52; and the last numeral (the extreme right-hand number) is marked on line 53. For example, if your school district code is 491, mark your sheet as follows:

a. line 51, mark blank #4
b. line 52, mark blank #9
c. line 53, mark blank #1

If the school district code consists of less than three digits, you must add zeros in front of the number to make it a 3-digit number. For example, if your school district code is 27, change this number to 027 and then mark your sheet as follows:

a. line 51, mark blank #0
b. line 52, mark blank #2
c. line 53, mark blank #7

Lines 55 - 58 . . . . Mark the blanks that correspond to your school identification number. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the identification number is marked on line 55; the next numeral is marked on line 56; the next numeral is marked on line 57; and the last numeral (the extreme right-hand number) is marked on line 58. For example, if your school identification number is 3182, your should mark your sheet as follows:

a. line 55, mark blank #3
b. line 56, mark blank #1
c. line 57, mark blank #8
d. line 58, mark blank #2

If your school identification number is 573, add zeros to change this number to a 4-digit number (0573) and mark your sheet as follows:

a. line 55, mark blank #0
b. line 56, mark blank #5
c. line 57, mark blank #7
d. line 58, mark blank #3

Lines 60 - 61 . . . . Mark the blanks that correspond to the code that best describes the type of school you attend. Your teacher will identify the type of school for you and the appropriate code should be selected from the following list:

a. Vocational and/or Technical (area or regional). . . code 01
b. Vocational and/or Technical (local). . . . . code 02

c. Technical Institute . . . . . code 03
d. Community or Junior College . . . . . code 04
e. University or College . . . . . code 05
f. Regular or Comprehensive High School . . . . . code 06
g. Combination (secondary and post-secondary) . . . code 07
h. Under Contract (private school, association) . . . code 08

Lines 64, 66, 68, 70 & 71 . . . . . Do not mark any blanks. (This section is to be completed by the guidance counselor; special instructions are provided in "Guide to the Teacher.")

Lines 72 - 80 . . . . Do not mark any blanks.

GUIDE TO THE TEACHER

Line 64 . . . . . Mark blank #1, "yes," if the student is enrolled in a vocational work study program. Mark blank #8, "no," if the student is not enrolled in a vocational work study program.

Line 66 . . . . . Mark the blank that corresponds to the quartile rank of the student: 1st, 2nd, 3rd, or 4th.

Line 68 . . . . . Mark blank #1 if the student's family income is less than $2,500 per year or mark blank #8 if the student's family income is more than $2,500 per year.

Lines 70 - 71 . . . . Mark the blanks that best describe the type of student. Use the following code for characteristics:

a. Regular . . . . . code 10
b. Handicapped . . . . . code 20
c. Gifted . . . . . code 30
d. Adult and Out-of-School Youth . . . . . code 40
e. Persons with Special Needs . . . . . code 50
f. Other . . . . . code 90

CONFIDENTIAL

PRELIMINARY

VOCATIONAL EDUCATION

STUDENT RECORD OF COURSE INFORMATION

1	STUDENT IDENTIFICATION NUMBER	41	SCHOOL IDENTIFICATION (REGION CODE)
2		42	
3		43	(CONGRESSIONAL DISTRICT CODE)
4		44	
5		45	
6		46	(COUNTY CODE)
7		47	
8		48	
9		49	
10		50	(SCHOOL DISTRICT CODE)
11	TEACHER IDENTIFICATION NUMBER	51	
12		52	
13		53	
14		54	(SCHOOL CODE)
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22	COURSE CODE	62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

STUDENT NAME _____ DATE PREPARED _____
LAST FIRST MIDDLE

STUDENT IDENTIFICATION NUMBER _____ SCHOOL _____

FEDERAL ELECTRIC CORPORATION — DEC. 65

PRELIMINARY

INSTRUCTIONS FOR VOCATIONAL EDUCATION

STUDENT RECORD OF COURSE INFORMATION

(1 December 1965)

GENERAL INSTRUCTIONS TO STUDENT

1. Handle this sheet carefully. Do not fold or bend this sheet.

2. Keep this sheet as clean as possible; make marks only within the boxes (= = =).

3. Use only a black soft lead pencil – #2 lead preferable.

4. Make all erasures complete.

5. Print your last name, first name, and middle initial in the space provided at the bottom of the sheet.

6. Enter your student identification number in the space provided at the bottom of the sheet.

7. Enter today's date in the space labeled "date prepared" at the bottom of the sheet.

8. Print the name of your school in the space provided at the bottom of the sheet.

9. Wait for further instructions from your teacher before you proceed to the detailed instructions that follow.

NOTE

Use a separate sheet for each course that you report.

DETAILED INSTRUCTIONS TO STUDENT

Lines 1 - 9 . . . . . Mark the blanks that correspond to your student identification number. Your identification number will be either your social security number or a number provided by your teacher. The first numeral (the extreme left-hand number) of your identification number is marked on line 1; the second numeral of your identification number is marked on line 2. Continue to mark one numeral on each line until the last numeral (the extreme right-hand number) is marked on line 9. For example, if your

social security number is 138-21-6057, you should mark your sheet as follows:

a. line 1, mark blank #1
b. line 2, mark blank #3
c. line 3, mark blank #8
d. line 4, mark blank #2
e. line 5, mark blank #1
f. line 6, mark blank #6
g. line 7, mark blank #0
h. line 8, mark blank #5
i. line 9, mark blank #7

If you are assigned an identification number consisting of less than nine numerals, you will have to change the number so that it contains nine numerals. To make this conversion, add zeros in front of the extreme left-hand number until a total of nine numerals make up the identification number. For example, if your assigned number is 706021, convert this 6-digit number to a 9-digit number by adding three zeros in front of the number, thus converting this number to 000706021. You would then mark your sheet to show this number as cited in the example above. That is, mark blank #0 on lines 1, 2, and 3, mark blank #7 on line 4; continue to mark one numeral on each line until the last numeral (#1) is marked on line 9.

Line 10 . . . . . . Do not mark any blanks.

Lines 12 - 20 . . . . Mark the blanks that correspond to the identification number of the teacher that teaches the course (lines 23-31) reported on this sheet. This number will be provided to you by your teacher. The instructions provided to you for recording your identification number on lines 1-9 should be followed when entering the teacher's identification number.

Line 21 . . . . . . Do not mark any blanks.

Lines 23 - 31 . . . . Mark the blanks that identify the course you are reporting on this sheet. Select the appropriate code from the course code listing attached to these instructions. Your teacher will assist you in the selection of the proper course code. The first numeral (the extreme left-hand number) of the course code is marked on line 23; the next numeral is marked on line 24. Continue to mark one numeral on each line until the last numeral (the extreme right-hand number) is marked on line 31.

NOTE

The course coding listing is the same listing included with Form VEIS-1 instructions in the VEIS State Operating Manual.

Lines 32 - 40 . . . Do not mark any blanks.

Lines 41 - 42 . . . . Mark the blanks that correspond to your school region code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the region code is marked on line 41 and the next numeral is marked on line 42. For example, if your school region code is 32, mark your sheet as follows:

a. line 41, mark blank #3
b. line 42, mark blank #2

If the school region code consists of one numeral, you must add a zero in front of the number to make it a 2-digit number. For example, if the code is 9, change the number to 09 and then mark your sheet as follows:

a. line 41, mark blank #0
b. line 42, mark blank #9

Lines 44 - 45 . . . . Mark the blanks that correspond to your congressional district code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the congressional code is marked on line 44 and the next numeral is marked on line 45. For example, if your congressional code is 12, mark your sheet as follows:

a. line 44, mark blank #1
b. line 45, mark blank #2

If the congressional district code consists of one numeral, you must add a zero in front of the number to make it a 2-digit number. For example, if the code is 3, change the number to 03 and then mark your sheet as follows:

a. line 44, mark blank #0
b. line 45, mark blank #3

Line 47 - 49 . . . . Mark the blanks that correspond to your county code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the county code is marked on line 47; the next numeral is marked on line 48; and the last numeral (the extreme right-hand number) is marked on line 49. For example, if your county code is 246, mark your sheet as follows:

a. line 47, mark blank #2
b. line 48, mark blank #4
c. line 49, mark blank #6

If the county code consists of less than three digits, you must add zeros in front of the number to make it a 3-digit number. For example, if the code is 7, change this number to 007 and then mark your sheet as follows:

a. line 47, mark blank #0
b. line 48, mark blank #0
c. line 49, mark blank #7

Lines 51 - 53 . . . . Mark the blanks that correspond to your school district code. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the school district code is marked on line 51; the next numeral is marked on line 52; and the last numeral (the extreme right-hand number) is marked on line 53. For example, if your school district code is 491, mark your sheet as follows:

a. line 51, mark blank #4
b. line 52, mark blank #9
c. line 53, mark blank #1

If the school district code consists of less than three digits, you must add zeros in front of the number to make it a 3-digit number. For example, if your school district code is 27, change this number to 027 and then mark your sheet as follows:

a. line 51, mark blank #0
b. line 52, mark blank #2
c. line 53, mark blank #7

Lines 55 - 58 . . . . Mark the blanks that correspond to your school identification number. Your teacher will provide you with this number. The first numeral (the extreme left-hand number) of the identification number is marked on line 55; the next numeral is marked on line 56; the next numeral is marked on line 57; and the last numeral (the extreme right-hand number) is marked on line 58. For example, if your school identification number is 3182, you should mark your sheet as follows:

a. line 55, mark blank #3
b. line 56, mark blank #1
c. line 57, mark blank #8
d. line 58, mark blank #2

If your school identification number is 573, add zeros to change this number to a 4-digit number (0573) and mark your sheet as follows:

a. line 55, mark blank #0

b. line 56, mark blank #5
c. line 57, mark blank #7
d. line 58, mark blank #3

Lines 60 - 80 . . . . Do not mark any blanks.